Title (en)

PRESSURE SENSING APPARATUS AND METHOD

Title (de)

DRUCKMESSVORRICHTUNG UND -VERFAHREN

Title (fr)

APPAREIL ET PROCÉDÉ DE DÉTECTION DE LA PRESSION

Publication

EP 3579090 B1 20201118 (EN)

Application

EP 19177643 A 20190531

Priority

GB 201809318 A 20180606

Abstract (en)

[origin: EP3579090A1] Apparatus (22) for processing signals from a touch panel (10) is described. The touch panel (10) includes a layer of piezoelectric material (16) disposed between a plurality of sensing electrodes (14, 20) and at least one common electrode (15). The apparatus (22) includes a first circuit (23) for connection to the plurality of sensing electrodes (14, 20). The first circuit (23) is configured to generate a plurality of first pressure signals (29). Each first pressure signal (29) corresponds to one or more sensing electrodes (14, 20) and is indicative of a pressure acting on the touch panel (10) proximate to the corresponding one or more sensing electrodes (14, 20). The apparatus (22) also includes a second circuit (24) for connection to the at least one common electrode (15). The second circuit (24) is configured to generate a second pressure signal (30) indicative of a total pressure applied to the touch panel (10). The apparatus (22) also includes a controller (25) configured to determine an external interference signal (32) based on a weighted sum over the second pressure signal (30) and the plurality of first pressure signals (29). The controller (25) is also configured to compare the external interference signal (32) against a pre-calibrated threshold (V_{thresh}). The controller is also configured, in response to the external interference signal (32) being greater than or equal to the pre-calibrated threshold (V_{thresh}), to output an interference flag (Int_{flag}) indicating that the first and second pressure signals (29, 30) are influenced by coupling to one or more external electrical fields.

IPC 8 full level

G06F 3/041 (2006.01)

CPC (source: CN EP GB KR US)

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